

## Appendix B

```
import java.awt.*;
5 import java.awt.event.*;
import javax.swing.*;

public class TestApplet extends JApplet
{
10    private String image;
    private double percentOfWidth;
    private double percentOfHeight;
    public void init()
    {
15        super.init();

        percentOfWidth = 0.0;
        percentOfHeight = 0.0;

20        image = getParameter("image");

        String param = getParameter("percentOfWidth");

        if (param != null)
25        {
            percentOfWidth =
Double.parseDouble(param);
        }

30        param = getParameter("percentOfHeight");

        if (param != null)
        {
            percentOfHeight =
35 Double.parseDouble(param);
        }

        Container contentPane = getContentPane();
        contentPane.add(new TestPanel(image,
40    percentOfWidth, percentOfHeight));
        }
    }

45    import java.awt.*;
    import java.awt.event.*;
    import javax.swing.*;

50    class TestPanel extends JPanel
    {
```

```
private String imageName;
private double percentOfWidth;
private double percentOfHeight;

5    private Image image;
    TestPanel(String imageName, double percentOfWidth,
double percentOfHeight)
    {
        this.imageName = imageName;
10       this.percentOfWidth = percentOfWidth;
        this.percentOfHeight = percentOfHeight;

        image =
Toolkit.getDefaultToolkit().getImage(imageName);
15       MediaTracker tracker = new MediaTracker(this);
        tracker.addImage(image, 0);

        try
20       {
            tracker.waitForID(0);
        }
        catch(InterruptedException e)
        {
25       }
    }
public void paintComponent(Graphics g)
{
    super.paintComponent(g);
30       Dimension container = getSize();
    double newWidth;
    double newHeight;

    if (percentOfWidth != 0.0)
    {
        // constant percentage of width
        newWidth = container.width *
percentOfWidth / 100.0;
40       newHeight = newWidth *
                    ((double) image.getHeight(this)
/ (double) image.getWidth(this));
    }
    else
45       {
        // constant percentage of height
        newHeight = container.height *
percentOfHeight / 100.0;
        newWidth = newHeight *
                    ((double) image.getWidth(this)
/ (double) image.getHeight(this));
    }
}
```

```
        }

        Graphics2D g2 = (Graphics2D) g;

5      g2.setRenderingHint(RenderingHints.KEY_ANTIALIASING,
RenderingHints.VALUE_ANTIALIAS_ON);

        g2.setRenderingHint(RenderingHints.KEY_RENDERING,
RenderingHints.VALUE_RENDER_QUALITY);
10     g2.drawImage(image, 0, 0, (int) newWidth, (int)
newHeight, null);
        }
    }

15

<!doctype html public "-//w3c//dtd html 4.0 transitional//en">
<html>
20 <head>
    <meta name="GENERATOR" content="Mozilla/4.61 [en] (WinNT; I)
[Netscape]">
    <title>TestApplet2</title>
</head>
25 <body>
<object classid="clsid:8AD9C840-044E-11D1-B3E9-00805F499D93"
    width="100%" height="100%" align="middle"
    codebase="http://<object classid="clsid:8AD9C840-044E-11D1-B3E9-
00805F499D93"
30     width="100%<param NAME="code" VALUE="TestApplet.class"><param
NAME="codebase" VALUE="classes/"><param NAME="type"
VALUE="application/x-java-applet;version=1.2.2"><param NAME="image"
value="d:/patent/beans.jpg"><param NAME="percentOfWidth"
value="50.0"><param NAME="scriptable" VALUE="true">No
35 JDK 1.2 support for APPLET!!</object>
</body>
</html>
```